

C A M B R I A

June 17, 2005

Mr. Robert Cave
Bay Area Air Quality Management District
Permit Services Division
939 Ellis Street
San Francisco, California 94109

Re: **Soil Vapor Extraction System Start-Up Report**

Shell-branded Service Station
3785 Santa Rosa Avenue
Santa Rosa, California
Incident # 98996138
SAP Code 136096



Dear Mr. Cave:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell), Cambria Environmental Technology, Inc. (Cambria) has prepared this *Soil Vapor Extraction System Start-Up Report* for the referenced site (Figures 1 and 2). A soil vapor extraction (SVE) system has operated at this site from October 1997 to July 2004 under the authorization of a Bay Area Air Quality Management District (BAAQMD) permit-to-operate (plant #10706). A King Buck catalytic oxidizer (King Buck) was utilized during this time period. In April 2005, the King Buck was replaced with a comparable Solleco catalytic oxidizer (Solleco) due to the age and operational issues with the King Buck. Start-up of the Solleco unit occurred on May 3, 2005 and was conducted in accordance with the conditions (#13752) of the BAAQMD permit-to-operate.

SITE BACKGROUND

Site Description: The subject property is located on the northwest corner of the Santa Rosa Avenue and Todd Road intersection in Santa Rosa, California (Figure 1). The site layout includes a station building, a carwash, two dispenser islands, and an underground fuel storage tank (UST) complex (Figure 2). Sixteen wells are used to monitor groundwater. Wells EW-1, EW-2, and MW-14 are currently used for groundwater extraction. Wells VE-1 through VE-5 are used for SVE. Table 1 summarizes well construction information.

SVE SYSTEM INSTALLATION

**Cambria
Environmental
Technology, Inc.**

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

The King Buck was replaced with a Solleco 150 cubic feet per minute (cfm) catalytic oxidizer. The trailer-mounted oxidizer contains the following components: entrained liquid separator, positive displacement blower and motor, electrical control panel, heating elements, catalyst cell, oxidizer chamber, and heat exchanger. Soil vapors are extracted by the blower through the entrained liquid

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separator, which removes condensation generated during the vacuum extraction process. Dilution air is added if necessary, and the vapors are pushed through the heat exchanger where they are heated utilizing the exhaust. After pre-heating, the vapors proceed to the catalyst cell within the oxidizer chamber where the electric elements heat the vapors to their final (minimum) combustion temperature of 800° F. The destruction efficiency for the oxidizer is 98% or above. The oxidizer is equipped with flow meters, pressure gauges, and sample ports to control and monitor system operation.

SVE SYSTEM START-UP



Cambria started the SVE system on May 3, 2005. Start-up was conducted in accordance with condition set #13752 of the BAAQMD permit to operate. Sub-condition #7 requires that testing and sampling be conducted within 10 days of start-up to demonstrate compliance with the destruction efficiency and benzene emission requirements (sub-condition #2). Testing and sampling were conducted for the first three days of operation. SVE system operational data and vapor-phase hydrocarbon mass removal data are presented as Tables 2 and 3, respectively. Laboratory analytical reports are presented as Appendix A. The following is a chronological description of start-up activities.

May 3, 2005: Start-up of the SVE system occurred on May 3, 2005. The system was set to extract only from well VE-3. After initial valve and temperature set point adjustments, Cambria field staff collected operational data. The Solleco was set to operate at a vacuum of 68 inches of water column-gauge (WC) and a flow of 48.3 cfm. These vacuum and flow data were measured at the header of the SVE pipe manifold. The dilution air valve was opened approximately 60%. Using a Horiba organic vapor analyzer (OVA), Cambria field measured vapor concentrations for the purpose of calculating destruction efficiency. Based on the post-dilution influent (230 parts per million by volume [ppmv]) and effluent (7 ppmv) field OVA readings, the destruction efficiency was 97.0%. Influent, post-dilution influent, and effluent vapor samples were collected to confirm field measurements. The system was shutdown until compliance was confirmed by sample analytical results.

The laboratory analytical report for the May 3, 2005 samples was received on May 4, 2005. Total petroleum hydrocarbons as gasoline (TPHg), benzene, and methyl tertiary butyl ether (MTBE) influent concentrations prior to dilution were reported as 1,700, <0.62, and <0.28 ppmv, respectively. TPHg, benzene, and MTBE post-dilution influent concentrations were reported as 130, 0.33, and <0.14 ppmv, respectively. TPHg, benzene, and MTBE effluent concentrations were reported as <9.8, <0.31, and <0.14 ppmv, respectively. Based on the May 3, 2005 lab results, the effluent precursor organic compound (POC) concentration was <9.94 ppmv. Therefore, per permit sub-condition #2, the permit destruction efficiency requirements were waived.

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May 4, 2005: Cambria restarted the system and set the system to extract only from well VE-3. Cambria maintained the dilution valve at approximately 60% open. The system operated at 68 inches of WC and 39.1 cfm. As before, these vacuum and flow data were measured at the header of the SVE pipe manifold. Based on the post-dilution influent (220 ppmv) and effluent (9 ppmv) field OVA readings, the destruction efficiency was 95.9%. Influent, post-dilution influent, and effluent vapor samples were collected to confirm field measurements. The system was shutdown at the end of this visit.



The laboratory analytical report for the May 4, 2005 samples was received on May 9, 2005. TPHg, benzene, and MTBE influent concentrations were reported as 2,000, <1.6, and <0.70 ppmv, respectively. TPHg, benzene, and MTBE post-dilution influent concentrations were reported as 210, <0.31, and <0.14 ppmv, respectively. TPHg, benzene, and MTBE effluent concentrations were reported as <9.8, <0.31, and <0.14 ppmv, respectively. Based on the May 4, 2005 lab results, the effluent POC concentration was <9.94 ppmv. Therefore, per permit sub-condition #2, the permit destruction efficiency requirements were waived.

May 5, 2005: Cambria restarted the system and set the system to extract only from well VE-3. Cambria adjusted the dilution valve to approximately 5% open to optimize extraction and maintain operation within permit specifications. After this adjustment, the system was operating at 68 inches WC and 31.6 cfm. As before, these vacuum and flow data were measured at the header of the SVE pipe manifold. Based on the post-dilution influent (290 ppmv) and effluent (13 ppmv) field OVA readings, the destruction efficiency was 95.5 %. Influent, post-dilution influent, and effluent vapor samples were collected to confirm field measurements. Given the OVA's degree of accuracy and the analytical results from previous samples, the SVE system was believed to be in compliance. The SVE system was left operating upon departure.

The laboratory analytical report for the May 5, 2005 samples was received on May 10, 2005. TPHg, benzene, and MTBE influent concentrations were reported as 1,400, <0.62, and <0.28ppmv, respectively. TPHg, benzene, and MTBE post-dilution influent concentrations were reported as 310, <0.62, and <0.28 ppmv, respectively. TPHg, benzene, and MTBE effluent concentrations were reported as <9.8, <0.31, and <0.14 ppmv, respectively. Based on the May 5, 2005 lab results, the effluent POC concentration was <9.94 ppmv. Therefore, per permit sub-condition #2, the permit destruction efficiency requirements were waived.

May 19, 2005: During this routine operation and maintenance visit, the system was operating upon arrival. The SVE system was still set to extract only from well VE-3. Cambria closed the dilution valve to optimize extraction and maintain operation within permit specifications. After this adjustment, the system was operating at 80 inches WC and 8.4 scfm. Using the OVA, the post-dilution influent concentration was measured at 39 ppmv and the effluent concentration was

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measured at 3 ppmv. Since the effluent concentration was less than 10 ppmv, the permit destruction efficiency requirements were waived, and the system was operating in compliance with the permit conditions. Vapor samples were not collected during this site visit. The SVE system was left operating upon departure.

PLANNED ACTIVITIES

Operation and Maintenance Visits: At a minimum, two site visits will be conducted each month to perform routine system maintenance and to record operational and well parameters. BAAQMD permit compliance samples will be collected, and analyzed as specified by the permit. The system data will be reviewed to evaluate system effectiveness and, if needed, system optimization modifications will be made.



CLOSING

If you have any questions or comments, please call Mike Murphy at (707) 933-2367.

Sincerely,
Cambria Environmental Technology, Inc.

A handwritten signature of Mike Murphy.

Mike Murphy
Project Manager

A handwritten signature of Joe W. Neely.
Joe W. Neely, PG
Senior Project Geologist
PG 6927

Attachments:

Table 1. Well/Boring/Probe Data
Table 2. Soil Vapor Extraction – Operational Data
Table 3. Soil Vapor Extraction – Vapor-Phase Mass Data

Figure 1. Site Vicinity Map
Figure 2. Groundwater Contour / Chemical Concentration Map

Appendix A. Laboratory Analytical Reports

cc: Mr. Denis Brown, Shell Oil Products US
Mr. Cliff Ives, Sonoma County Department of Health Services
Mr. Luis Rivera, Regional Water Quality Control Board, North Coast Region

TABLE 1

WELL/BORING/PROBE DATA
Shell-branded Service Station
3785 Santa Rosa Avenue
Santa Rosa, California
WIC# 204-6996-2607

Name	Type	Date Installed	Surface Elev (ft)	Total Depth (ft)	Soil Sample		First Encountered GW		Screen Diam. (In)	Screen Depth (ft)		Packer Int. Depth (ft.)	Comments
					Incr. or	Depth(s)	Depth (ft)	Elev (ft)		Top	Bottom		
MW-1	Well (HSA)	27-Nov-84	102.80	18.5	5	---	15.5	86.73	4	9	16.5	---	
MW-2	Well (HSA)	28-Nov-84	104.85	21.5	5	---	16.5	87.81	4	14	20	---	
MW-3	Well (HSA)	28-Nov-84	105.23	21.5	5	---	16.0	88.64	4	14	20	---	
MW-4	Well (HSA)	29-Nov-84	103.10	21.5	5	---	16.0	85.97	4	14	20	---	
MW-5	Well (HSA)	29-Nov-84	104.36	21.5	5	---	17.0	86.63	4	14	20	---	
MW-6	Well (HSA)	30-Nov-84	103.44	21.5	5	---	16.0	86.79	4	13	20	---	
B-1	Boring (HSA)	27-Nov-84	---	25.5	5	---	15.0	---	---	---	---	---	
MW-7	Well (HSA)	30-Jul-85	104.48	69.5	5,10	---	9.5	94.98	4	66	69	---	Destroyed 31-Jan-96
MW-8	Well (HSA)	01-Aug-85	104.65	59.5	---	---	15.0	89.65	4	54	59	---	Destroyed 31-Jan-96
MW-9	Well (HSA)	02-Aug-85	104.63 *	48.5	---	---	13.0	91.63	4	43	48	---	Destroyed 30-Jan-96
EW-1	Well (Bucket/Auger)	20-Nov-87	---	21.2	5	---	18.5	---	10	5	20	---	
HP 1-14 **													
MW-10	Well (HSA)	30-Jun-89	---	21.0	5	--	13.0	91.43	2	4.5	18.5	---	
MW-11	Well (HSA)	30-Jun-89	---	19.5	5	--	14	89.77	2	4.2	18.3	---	
MW-12	Well (HSA)	30-Jun-89	---	21.0	5	--	14	91.51	2	4.7	18.8	---	
MW-13	Well (HSA)	28-Jan-92	105.27	20.5	5	--	6	97.31	2	3.0	20.0	---	
MW-14	Well (HSA)	29-Jan-92	103.03	20.5	5	--	6	97.03	2	3.0	20.0	---	
MW-15	Well (HSA)	28-Jan-92	102.77	20.5	5	--	6	96.77	2	3.0	20.0	---	
MW-16	Well (HSA)	28-Jul-94	103.00	19.5	5	--	6.50	---	2	4.5	19.5	---	
MW-17	Well (HSA)	27-Jul-94	102.07	19.5	5	--	6.00	---	2	4.5	19.5	---	
MW-18	Well (HSA)	28-Jul-94	102.49	19.5	5	--	6.50	---	2	4.5	19.5	---	
VE-1	SVE Well	22-Jan-93	NA	16.5	5	--	10	NA	2	4.0	14.0	---	
VE-2	SVE Well	22-Jan-93	NA	15.0	5	--	10	NA	2	4.0	14.0	---	
VE-3	SVE Well	22-Jan-93	NA	16.5	5	--	10	NA	2	4.0	14.0	---	
VE-4	SVE Well	22-Jan-93	NA	16.5	5	--	10	NA	2	4.0	14.0	---	
VE-5	SVE Well	22-Jan-93	NA	16.5	5	--	10	NA	2	4.0	14.0	---	
EW-2	Well (HSA)	10-Oct-96		25.0	3		8		4	5.0	25.0		

Notes:

* = Used Enviro's QMR elevation

** = Hydro Punch points HP-1 to HP-14 were installed in October 1989.

SVE = Soil Vapor Extraction

Table 2: Soil Vapor Extraction - Operational Data - Shell Service Station, 3785 Santa Rosa Avenue, Santa Rosa, California

Date	Hour Meter (hours)	Period Operation (hours)	Operating Vacuum (inH ₂ O)	Influent Flow Rate (acf m)	Influent Flow Rate (scfm)	Effluent Flow Rate (acf m)	Effluent Flow Rate (scfm)	Pre-Cat Temp (F)	Process Temp (F)	Post-Cat Temp (F)	Influent1 PID (ppmv)	Influent2 PID (ppmv)	Effluent PID (ppmv)	Destruction Efficiency (%)
05/03/05 a	15094.1	0	68	58	48.3	58	48.3	780	928	780	2,550	230	7	97.0%
05/04/05	15096.3	2.2	68	47	39.1	47	39.1	760	897	760	2,100	220	9	95.9%
05/05/05	15100.6	4.3	68	38	31.6	38	31.6	750	888	750	1,720	290	13	95.5%
05/19/05	15436.3	335.7	80	10.5	8.4	10.5	8.4	688	927	686	240	39	3	92.3%
06/01/05	15751.3	315.0	82	43.0	34.4	43.0	34.4	684	907	686	162	48	1	97.9%
06/07/05														
Average Flow Rate =				32.4		32.4								

Abbreviations and Notes:inH₂O = Inches of Water Column

acf m = Actual cubic feet per minute

scfm = Standard cubic feet per minute

F = Degrees farenheit

ppmv = Parts per million by volume

PID = Photo-ionization detector

Influent1 = Pre-dilution field-measured vapor concentration

Influent2 = Post-dilution field-measured vapor concentration

scfm = acfm (absolute operating pressure, inH₂O / standard pressure, 406.9 inH₂O)

Destruction efficiency (field calculated) = [(Influent2 PID, ppmv - Effluent PID, ppmv) / (Influent2 PID, ppmv)] x 100

Italicized hour meter values are calculated due to erroneous hour meter readings.

a - King Buck SVE unit replaced by a Solleco SVE unit. Start-up of the Solleco SVE unit occurred on 5/3/05. The King Buck SVE unit operated from October 2, 1997 through April 12, 2005.

Table 3: Soil Vapor Extraction - Vapor-phase Mass Data - Shell Service Station, 3785 Santa Rosa Avenue, Santa Rosa, California

Date	Influent 1 Concentrations				Influent 2 Concentrations				Effluent Concentrations				TPHg			Benzene			MTBE			POC		
	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	POC (ppmv)	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	POC (ppmv)	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	POC (ppmv)	Removal Rate (ppd)	Cumulative TPHg (pounds)	Emission Rate (ppd)	Benzene Removal Rate (ppd)	Cumulative Benzene (pounds)	Emission Rate (ppd)	MTBE Removal Rate (ppd)	Cumulative MTBE (pounds)	Emission Rate (ppd)	POC Removal Rate (ppd)	POC Emission (ppd)	POC Efficiency (%)
05/03/05 a	1,700	<0.62	<0.28	1,700.3	130	0.33	<0.14	130.1	<9.8	<0.31	<0.14	<9.9	2.0	1,547.0 a	0.152	0.005	17.24 a	0.004	0.0011	0.000	0.002	2.0	0.154	waived
05/04/05	2,000	<1.6	<0.70	2,000.7	210	<0.31	<0.14	210.1	<9.8	<0.31	<0.14	<9.9	2.6	1,547.2	0.123	0.002	17.24	0.004	0.0009	0.000	0.002	2.6	0.125	waived
05/05/05	1,400	<0.62	<0.28	1,400.3	310	<0.62	<0.28	310.3	<9.8	<0.31	<0.14	<9.9	3.1	1,547.8	0.099	0.003	17.24	0.003	0.0015	0.000	0.001	3.2	0.101	waived
05/19/05	NS	NS	NS	NA	NS	NS	NS	NA	NS	NS	NS	NA	0.8	1,559.5	0.027	0.001	17.25	0.001	0.0004	0.006	0.000	0.8	0.027	waived

Total Pounds Removed:

TPHg = 1,560

Benzene = 17.25

MTBE = 0.006

Abbreviations and Notes:

TPHg = Total purgeable hydrocarbons as gasoline

MTBE = Methyl tertiary butyl ether

TPHg, Benzene, and MTBE analyzed by EPA Method 8260B in 1 liter teflar bag samples

POC = Precursor Organic Compounds (ppmv) = TPHg + MTBE as specified by Robert Cave of the BAAQMD on 08/21/03.

PPD = pounds per day

Influent1 = pre-dilution

Influent2 = post-dilution

ppmv = parts per million by volume

TPHg / Benzene / MTBE / POC / removal and emission rate = Rate based on Bay Area Air Quality Management District's Manual of Procedures for Soil Vapor Extraction dated July 17, 1991.

Removal/Emission Rate = C (ppmv) x Q (cfm) x (lb-mole/386ft³) x MW (lb/lb-mole) x 60 min/hr x 24 hr/day x 10⁻⁶

where; C = concentration, Q = flow, MW= molecular weight (86 lb/lb-mole for TPHg, 78 lb/lb-mole for benzene, 88 lb/lb-mole for MTBE, 86 lb/lb-mole for POC (=hexane))

If dilution air is utilized, then influent 2 concentration is used in mass calculation. If dilution air not utilized, then influent 2 is not sampled and influent 1 is used in mass calculation (influent 1 is assumed to be equal to influent 2).

Cumulative TPHg / Benzene / MTBE removal = Previous removal rate multiplied by the interval of operation plus the previous total

Destruction Efficiency = (100)[(Mass Extracted - Mass Emitted)/(Mass Extracted)]

BAAQMD Permit Conditions:

98.5% if influent2 > 2000 ppmv

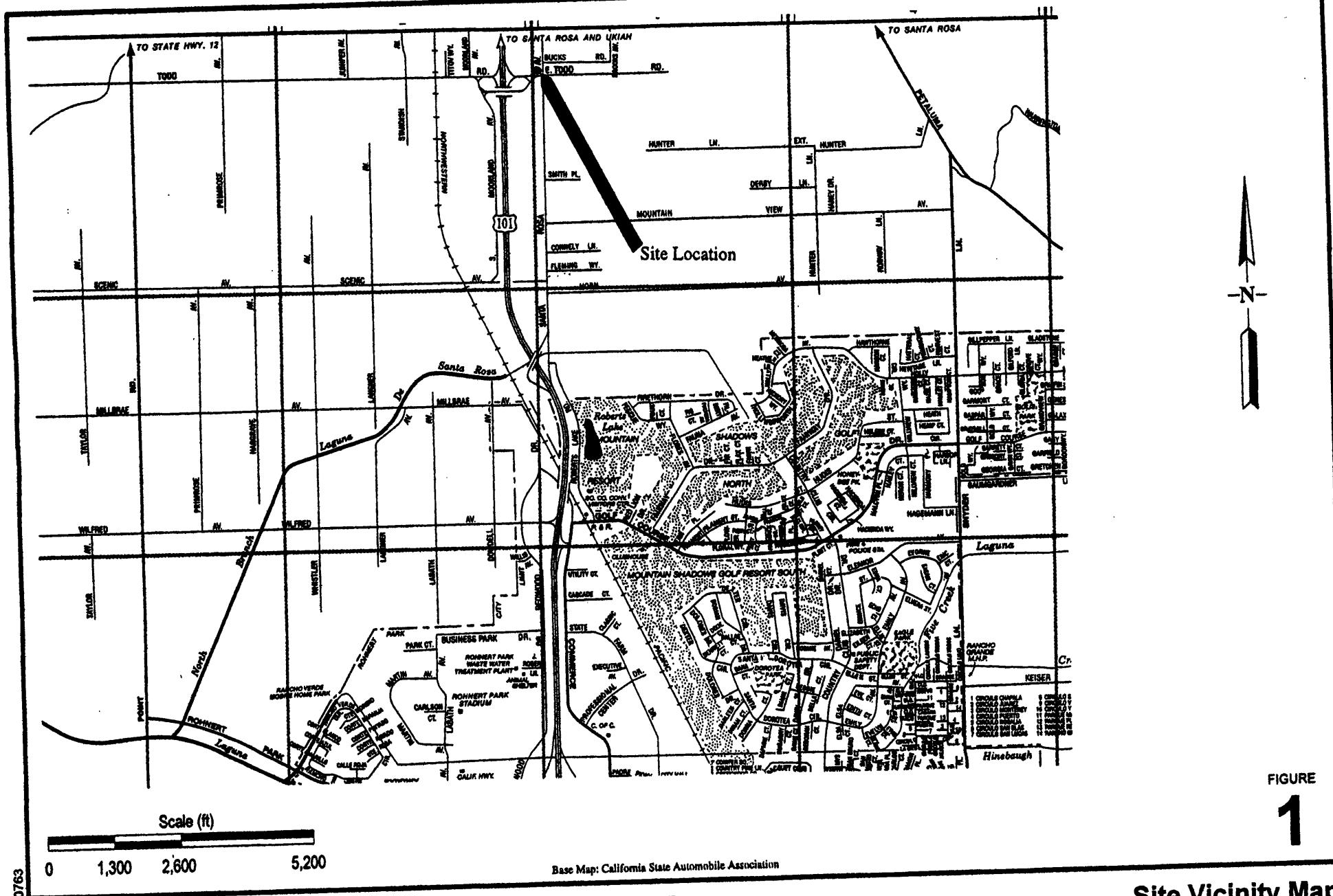
97% if 200 ppmv < influent2 < 2000 ppmv

90% if influent2 < 200 ppmv

Waived if effluent < 10 ppmv

Benzene emission < 0.020 lbs/day

a - King Buck SVE unit replaced by a Solleco SVE unit. Start-up of the Solleco SVE unit occurred on 5/3/05. The King Buck SVE unit operated from October 2, 1997 through April 12, 2005.



Shell-branded Service Station

3785 Santa Rosa Avenue
Santa Rosa, California



CAMBRIA

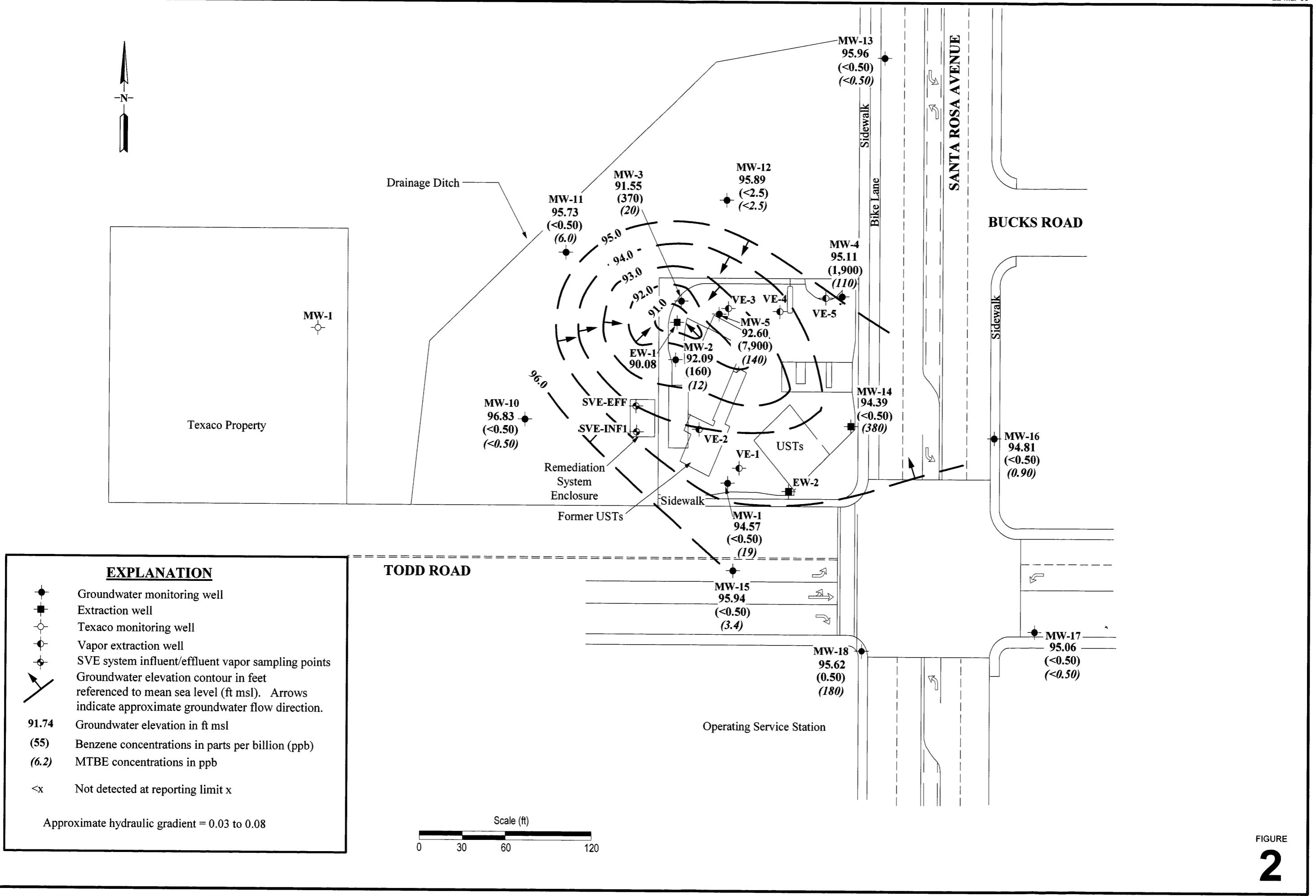
1

Site Vicinity Map

Groundwater Contour/Chemical Concentration Map



Shell-branded Service Station
3785 Santa Rosa Avenue
Santa Rosa, California



APPENDIX A

Laboratory Analytical Reports

Cambria Environmental Emeryville

May 04, 2005

5900 Hollis Street, Ste. A
Emeryville, CA 94608

Attn.: Trey Jackson

Project#: 247-0763-003

Project: 98996138

Site: 3785 Santa Rosa Avenue, Santa Rosa

Attached is our report for your samples received on 05/03/2005 17:31

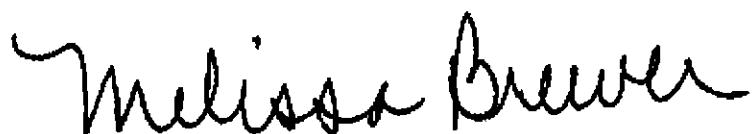
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 06/17/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,



Melissa Brewer
Project Manager

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SVE-INF-1	05/03/2005 14:00	Air	1
SVE-EFF	05/03/2005 14:00	Air	2
SVE-INF-2	05/03/2005 14:00	Air	3

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Prep(s): 5030B

Test(s): 8260B

Sample ID: SVE-INF-1

Lab ID: 2005-05-0086 - 1

Sampled: 05/03/2005 14:00

Extracted: 5/3/2005 18:46

Matrix: Air

QC Batch#: 2005/05/03-2D.68

Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	1700	20	ppmv	2.00	05/03/2005 18:46	
Benzene	ND	0.62	ppmv	2.00	05/03/2005 18:46	
Toluene	ND	0.52	ppmv	2.00	05/03/2005 18:46	
Ethylbenzene	5.3	0.46	ppmv	2.00	05/03/2005 18:46	
Total xylenes	9.0	0.46	ppmv	2.00	05/03/2005 18:46	
Methyl tert-butyl ether (MTBE)	ND	0.28	ppmv	2.00	05/03/2005 18:46	
Surrogate(s)						
1,2-Dichloroethane-d4	101.4	76-130	%	2.00	05/03/2005 18:46	
Toluene-d8	94.0	78-115	%	2.00	05/03/2005 18:46	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Prep(s): 5030B Test(s): 8260B
Sample ID: SVE-EFF Lab ID: 2005-05-0086 - 2
Sampled: 05/03/2005 14:00 Extracted: 5/3/2005 18:28
Matrix: Air QC Batch#: 2005/05/03-2D.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	9.8	ppmv	1.00	05/03/2005 18:28	
Benzene	ND	0.31	ppmv	1.00	05/03/2005 18:28	
Toluene	ND	0.26	ppmv	1.00	05/03/2005 18:28	
Ethylbenzene	ND	0.23	ppmv	1.00	05/03/2005 18:28	
Total xylenes	ND	0.23	ppmv	1.00	05/03/2005 18:28	
Methyl tert-butyl ether (MTBE)	ND	0.14	ppmv	1.00	05/03/2005 18:28	
Surrogate(s)						
1,2-Dichloroethane-d4	102.5	76-130	%	1.00	05/03/2005 18:28	
Toluene-d8	94.9	78-115	%	1.00	05/03/2005 18:28	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Prep(s): 5030B Test(s): 8260B
Sample ID: SVE-INF-2 Lab ID: 2005-05-0086 - 3
Sampled: 05/03/2005 14:00 Extracted: 5/4/2005 12:22
Matrix: Air QC Batch#: 2005/05/04-1A.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	130	9.8	ppmv	1.00	05/04/2005 12:22	
Benzene	0.33	0.31	ppmv	1.00	05/04/2005 12:22	
Toluene	ND	0.26	ppmv	1.00	05/04/2005 12:22	
Ethylbenzene	0.64	0.23	ppmv	1.00	05/04/2005 12:22	
Total xylenes	1.2	0.23	ppmv	1.00	05/04/2005 12:22	
Methyl tert-butyl ether (MTBE)	ND	0.14	ppmv	1.00	05/04/2005 12:22	
Surrogate(s)						
1,2-Dichloroethane-d4	99.2	76-130	%	1.00	05/04/2005 12:22	
Toluene-d8	90.4	78-115	%	1.00	05/04/2005 12:22	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank**Water****QC Batch # 2005/05/03-2D.68**

MB: 2005/05/03-2D.68-035

Date Extracted: 05/03/2005 17:35

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	05/03/2005 17:35	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/03/2005 17:35	
Benzene	ND	0.5	ug/L	05/03/2005 17:35	
Toluene	ND	0.5	ug/L	05/03/2005 17:35	
Ethylbenzene	ND	0.5	ug/L	05/03/2005 17:35	
Total xylenes	ND	1.0	ug/L	05/03/2005 17:35	
Surrogates(s)					
1,2-Dichloroethane-d4	85.0	73-130	%	05/03/2005 17:35	
Toluene-d8	90.2	81-114	%	05/03/2005 17:35	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2005/05/04-1A.68

MB: 2005/05/04-1A.68-029

Date Extracted: 05/04/2005 08:29

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	05/04/2005 08:29	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/04/2005 08:29	
Benzene	ND	0.5	ug/L	05/04/2005 08:29	
Toluene	ND	0.5	ug/L	05/04/2005 08:29	
Ethylbenzene	ND	0.5	ug/L	05/04/2005 08:29	
Total xylenes	ND	1.0	ug/L	05/04/2005 08:29	
Surrogates(s)					
1,2-Dichloroethane-d4	89.0	73-130	%	05/04/2005 08:29	
Toluene-d8	97.4	81-114	%	05/04/2005 08:29	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2005/05/03-2D.68

LCS 2005/05/03-2D.68-000
LCSD

Extracted: 05/03/2005

Analyzed: 05/03/2005 18:00

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	17.6		25	70.4		65-165	20			
Benzene	19.0		25	76.0		69-129	20			
Toluene	21.8		25	87.2		70-130	20			
Surrogates(s)										
1,2-Dichloroethane-d4	376		500	75.2		73-130				
Toluene-d8	461		500	92.2		81-114				

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike**Water****QC Batch # 2005/05/04-1A.68**

LCS 2005/05/04-1A.68-010
LCSD

Extracted: 05/04/2005

Analyzed: 05/04/2005 08:10

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	22.4		25	89.6			65-165	20		
Benzene	23.3		25	93.2			69-129	20		
Toluene	25.8		25	103.2			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	377		500	75.4			73-130			
Toluene-d8	458		500	91.6			81-114			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD)

Water

QC Batch # 2005/05/03-2D.68

MS/MSD

Lab ID: 2005-04-0755 - 001

MS: 2005/05/03-2D.68-029

Extracted: 05/03/2005

Analyzed: 05/03/2005 21:29

MSD: 2005/05/03-2D.68-047

Extracted: 05/03/2005

Dilution: 1.00

Analyzed: 05/03/2005 21:47

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample		ug/L	MS	MSD	RPD	Rec.	RPD	MS
Methyl tert-butyl ether	22.8	22.2	ND	25	91.2	88.8	2.7	65-165	20		
Benzene	25.3	24.6	ND	25	101.2	98.4	2.8	69-129	20		
Toluene	26.8	25.7	ND	25	107.2	102.8	4.2	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	373	377		500	74.6	75.4		73-130			
Toluene-d8	464	465		500	92.8	93.0		81-114			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD)**Water****QC Batch # 2005/05/04-1A.68**

MS/MSD

Lab ID: 2005-04-0743 - 001

MS: 2005/05/04-1A.68-021

Extracted: 05/04/2005

Analyzed: 05/04/2005 09:21

MSD: 2005/05/04-1A.68-039

Extracted: 05/04/2005

Analyzed: 05/04/2005 09:39

Dilution: 1.00

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	23.7	21.4	0.908	25	91.2	82.0	10.6	65-165	20		
Benzene	24.2	23.6	ND	25	96.8	94.4	2.5	69-129	20		
Toluene	26.5	24.8	ND	25	106.0	99.2	6.6	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	409	400		500	81.8	80.0		73-130			
Toluene-d8	469	473		500	93.8	94.6		81-114			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/03/2005 17:31

Site: 3785 Santa Rosa Avenue, Santa Rosa

Legend and Notes

Analysis Flag

L2

Reporting limits were raised due to high level of analyte present
in the sample.

Cambria Environmental Emeryville

May 09, 2005

5900 Hollis Street, Ste. A
Emeryville, CA 94608

Attn.: Trey Jackson

Project#: 247-0763-003

Project: 98996138

Site: 3785 Santa Rosa Avenue, Santa Rosa

Attached is our report for your samples received on 05/04/2005 15:35

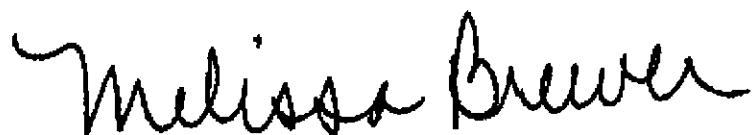
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after
06/18/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,



Melissa Brewer
Project Manager

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SVE-INF 1	05/04/2005 08:40	Air	1
SVE-EFF	05/04/2005 08:35	Air	2
SVE-INF 2	05/04/2005 08:30	Air	3

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Prep(s): 5030B Test(s): 8260B
Sample ID: **SVE-INF 1** Lab ID: 2005-05-0133 - 1
Sampled: 05/04/2005 08:40 Extracted: 5/5/2005 19:45
Matrix: Air QC Batch#: 2005/05/05-2B.64
Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	2000	49	ppmv	5.00	05/05/2005 19:45	
Benzene	ND	1.6	ppmv	5.00	05/05/2005 19:45	
Toluene	ND	1.3	ppmv	5.00	05/05/2005 19:45	
Ethylbenzene	5.8	1.2	ppmv	5.00	05/05/2005 19:45	
Total xylenes	11	1.2	ppmv	5.00	05/05/2005 19:45	
Methyl tert-butyl ether (MTBE)	ND	0.70	ppmv	5.00	05/05/2005 19:45	
Surrogate(s)						
1,2-Dichloroethane-d4	109.4	76-130	%	5.00	05/05/2005 19:45	
Toluene-d8	105.0	78-115	%	5.00	05/05/2005 19:45	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Prep(s): 5030B

Test(s): 8260B

Sample ID: SVE-EFF

Lab ID: 2005-05-0133 - 2

Sampled: 05/04/2005 08:35

Extracted: 5/5/2005 14:37

Matrix: Air

QC Batch#: 2005/05/05-1C.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	9.8	ppmv	1.00	05/05/2005 14:37	
Benzene	ND	0.31	ppmv	1.00	05/05/2005 14:37	
Toluene	ND	0.26	ppmv	1.00	05/05/2005 14:37	
Ethylbenzene	ND	0.23	ppmv	1.00	05/05/2005 14:37	
Total xylenes	ND	0.23	ppmv	1.00	05/05/2005 14:37	
Methyl tert-butyl ether (MTBE)	ND	0.14	ppmv	1.00	05/05/2005 14:37	
Surrogate(s)						
1,2-Dichloroethane-d4	96.3	76-130	%	1.00	05/05/2005 14:37	
Toluene-d8	100.6	78-115	%	1.00	05/05/2005 14:37	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SVE-INF 2	Lab ID:	2005-05-0133 - 3
Sampled:	05/04/2005 08:30	Extracted:	5/5/2005 19:00
Matrix:	Air	QC Batch#:	2005/05/05-2B.66
pH:	<2		

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	210	9.8	ppmv	1.00	05/05/2005 19:00	
Benzene	ND	0.31	ppmv	1.00	05/05/2005 19:00	
Toluene	ND	0.26	ppmv	1.00	05/05/2005 19:00	
Ethylbenzene	0.55	0.23	ppmv	1.00	05/05/2005 19:00	
Total xylenes	1.7	0.23	ppmv	1.00	05/05/2005 19:00	
Methyl tert-butyl ether (MTBE)	ND	0.14	ppmv	1.00	05/05/2005 19:00	
Surrogate(s)						
1,2-Dichloroethane-d4	105.4	76-130	%	1.00	05/05/2005 19:00	
Toluene-d8	96.7	78-115	%	1.00	05/05/2005 19:00	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

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Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2005/05/05-1C.66

MB: 2005/05/05-1C.66-002

Date Extracted: 05/05/2005 08:02

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	05/05/2005 08:02	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/05/2005 08:02	
Benzene	ND	0.5	ug/L	05/05/2005 08:02	
Toluene	ND	0.5	ug/L	05/05/2005 08:02	
Ethylbenzene	ND	0.5	ug/L	05/05/2005 08:02	
Total xylenes	ND	1.0	ug/L	05/05/2005 08:02	
Surrogates(s)					
1,2-Dichloroethane-d4	94.3	73-130	%	05/05/2005 08:02	
Toluene-d8	108.2	81-114	%	05/05/2005 08:02	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
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Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank**Water****QC Batch # 2005/05/05-2B.64**

MB: 2005/05/05-2B.64-047

Date Extracted: 05/05/2005 17:47

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	05/05/2005 17:47	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/05/2005 17:47	
Benzene	ND	0.5	ug/L	05/05/2005 17:47	
Toluene	ND	0.5	ug/L	05/05/2005 17:47	
Ethylbenzene	ND	0.5	ug/L	05/05/2005 17:47	
Total xylenes	ND	1.0	ug/L	05/05/2005 17:47	
Surrogates(s)					
1,2-Dichloroethane-d4	111.4	73-130	%	05/05/2005 17:47	
Toluene-d8	104.4	81-114	%	05/05/2005 17:47	

Gas/BTEX/MTBE by 8260B (C6-C12)

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Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank**Water****QC Batch # 2005/05/05-2B.66**

MB: 2005/05/05-2B.66-003

Date Extracted: 05/05/2005 18:03

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	05/05/2005 18:03	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/05/2005 18:03	
Benzene	ND	0.5	ug/L	05/05/2005 18:03	
Toluene	ND	0.5	ug/L	05/05/2005 18:03	
Ethylbenzene	ND	0.5	ug/L	05/05/2005 18:03	
Total xylenes	ND	1.0	ug/L	05/05/2005 18:03	
Surrogates(s)					
1,2-Dichloroethane-d4	97.2	73-130	%	05/05/2005 18:03	
Toluene-d8	104.6	81-114	%	05/05/2005 18:03	

Gas/BTEX/MTBE by 8260B (C6-C12)

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Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2005/05/05-1C.66

LCS 2005/05/05-1C.66-011
LCSD 2005/05/05-1C.66-037

Extracted: 05/05/2005
Extracted: 05/05/2005

Analyzed: 05/05/2005 07:11
Analyzed: 05/05/2005 07:37

Compound	Conc.		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	22.1	21.5	25	88.4	86.0	2.8	65-165	20		
Benzene	20.4	21.8	25	81.6	87.2	6.6	69-129	20		
Toluene	25.6	27.3	25	102.4	109.2	6.4	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	435	451	500	87.0	90.2		73-130			
Toluene-d8	530	559	500	106.0	111.8		81-114			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike**Water****QC Batch # 2005/05/05-2B.64**

LCS 2005/05/05-2B.64-025
LCSD

Extracted: 05/05/2005

Analyzed: 05/05/2005 17:25

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	26.2		25	104.8			65-165	20		
Benzene	25.0		25	100.0			69-129	20		
Toluene	27.2		25	108.8			70-130	20		
<i>Surrogates(s)</i>										
1,2-Dichloroethane-d4	548		500	109.6			73-130			
Toluene-d8	511		500	102.2			81-114			

Gas/BTEX/MTBE by 8260B (C6-C12)

.Cambria Environmental Emeryville

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Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike**Water****QC Batch # 2005/05/05-2B.66**

LCS 2005/05/05-2B.66-012

Extracted: 05/05/2005

Analyzed: 05/05/2005 17:12

LCSD 2005/05/05-2B.66-038

Extracted: 05/05/2005

Analyzed: 05/05/2005 17:38

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	20.8	22.2	25	83.2	88.8	6.5	65-165	20		
Benzene	19.4	20.9	25	77.6	83.6	7.4	69-129	20		
Toluene	22.5	24.7	25	90.0	98.8	9.3	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	454	439	500	90.8	87.8		73-130			
Toluene-d8	532	539	500	106.4	107.8		81-114			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD)**Water****QC Batch # 2005/05/05-1C.66**

MS/MSD

Lab ID: 2005-04-0759 - 005

MS: 2005/05/05-1C.66-025

Extracted: 05/05/2005

Analyzed: 05/05/2005 10:25

MSD: 2005/05/05-1C.66-050

Extracted: 05/05/2005

Dilution: 1.00

Analyzed: 05/05/2005 10:50

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	20.4	24.6	ND	25	81.6	98.4	18.7	65-165	20		
Benzene	20.9	23.2	ND	25	83.6	92.8	10.4	69-129	20		
Toluene	25.4	27.0	ND	25	101.6	108.0	6.1	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	468	461		500	93.5	92.2		73-130			
Toluene-d8	521	517		500	104.1	103.4		81-114			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

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Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD)**Water****QC Batch # 2005/05/05-2B.64**

MS/MSD

Lab ID: 2005-04-0782 - 001

MS: 2005/05/05-2B.64-030

Extracted: 05/05/2005

Analyzed: 05/05/2005 20:30

Dilution: 1.00

MSD: 2005/05/05-2B.64-053

Extracted: 05/05/2005

Analyzed: 05/05/2005 20:53

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	26.1	30.7	3.8	25	89.2	107.6	18.7	65-165	20		
Benzene	21.8	23.4	ND	25	87.2	93.6	7.1	69-129	20		
Toluene	23.3	26.0	ND	25	93.2	104.0	11.0	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	555	553		500	111.0	110.6		73-130			
Toluene-d8	488	508		500	97.7	101.6		81-114			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/04/2005 15:35

Site: 3785 Santa Rosa Avenue, Santa Rosa

Legend and Notes

Analysis Flag

L2

Reporting limits were raised due to high level of analyte present
in the sample.

Cambria Environmental Emeryville

May 10, 2005

5900 Hollis Street, Ste. A
Emeryville, CA 94608

Attn.: Trey Jackson

Project#: 247-0763-003

Project: 98996138

Site: 3785 Santa Rosa Avenue, Santa Rosa

Attached is our report for your samples received on 05/05/2005 14:02

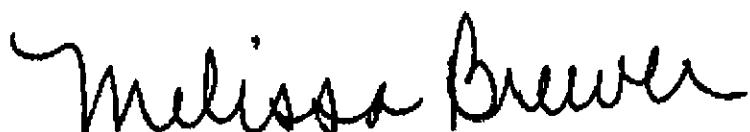
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after
06/19/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,



Melissa Brewer
Project Manager

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Trey Jackson

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/05/2005 14:02

Site: 3785 Santa Rosa Avenue, Santa Rosa

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SVE-INF-1	05/05/2005 11:00	Air	1
SVE-EFF	05/05/2005 11:00	Air	2
SVE-INF-2	05/05/2005 11:00	Air	3

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/05/2005 14:02

Site: 3785 Santa Rosa Avenue, Santa Rosa

Prep(s): 5030B Test(s): 8260B
Sample ID: SVE-INF-1 Lab ID: 2005-05-0156 - 1
Sampled: 05/05/2005 11:00 Extracted: 5/5/2005 19:00
Matrix: Air QC Batch#: 2005/05/05-2B.64
Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	1400	20	ppmv	2.00	05/05/2005 19:00	
Benzene	ND	0.62	ppmv	2.00	05/05/2005 19:00	
Toluene	ND	0.52	ppmv	2.00	05/05/2005 19:00	
Ethylbenzene	2.7	0.46	ppmv	2.00	05/05/2005 19:00	
Total xylenes	6.3	0.46	ppmv	2.00	05/05/2005 19:00	
Methyl tert-butyl ether (MTBE)	ND	0.28	ppmv	2.00	05/05/2005 19:00	
Surrogate(s)						
1,2-Dichloroethane-d4	109.9	76-130	%	2.00	05/05/2005 19:00	
Toluene-d8	100.0	78-115	%	2.00	05/05/2005 19:00	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/05/2005 14:02

Site: 3785 Santa Rosa Avenue, Santa Rosa

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SVE-EFF	Lab ID:	2005-05-0156 - 2
Sampled:	05/05/2005 11:00	Extracted:	5/5/2005 18:38
Matrix:	Air	QC Batch#:	2005/05/05-2B.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	9.8	ppmv	1.00	05/05/2005 18:38	
Benzene	ND	0.31	ppmv	1.00	05/05/2005 18:38	
Toluene	ND	0.26	ppmv	1.00	05/05/2005 18:38	
Ethylbenzene	ND	0.23	ppmv	1.00	05/05/2005 18:38	
Total xylenes	ND	0.23	ppmv	1.00	05/05/2005 18:38	
Methyl tert-butyl ether (MTBE)	ND	0.14	ppmv	1.00	05/05/2005 18:38	
Surrogate(s)						
1,2-Dichloroethane-d4	109.8	76-130	%	1.00	05/05/2005 18:38	
Toluene-d8	101.9	78-115	%	1.00	05/05/2005 18:38	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
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Project: 247-0763-003
98996138

Received: 05/05/2005 14:02

Site: 3785 Santa Rosa Avenue, Santa Rosa

Prep(s): 5030B Test(s): 8260B
Sample ID: SVE-INF-2 Lab ID: 2005-05-0156 - 3
Sampled: 05/05/2005 11:00 Extracted: 5/5/2005 19:23
Matrix: Air QC Batch#: 2005/05/05-2B.64

Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	310	20	ppmv	2.00	05/05/2005 19:23	
Benzene	ND	0.62	ppmv	2.00	05/05/2005 19:23	
Toluene	ND	0.52	ppmv	2.00	05/05/2005 19:23	
Ethylbenzene	1.0	0.46	ppmv	2.00	05/05/2005 19:23	
Total xylenes	2.5	0.46	ppmv	2.00	05/05/2005 19:23	
Methyl tert-butyl ether (MTBE)	ND	0.28	ppmv	2.00	05/05/2005 19:23	
Surrogate(s)						
1,2-Dichloroethane-d4	111.9	76-130	%	2.00	05/05/2005 19:23	
Toluene-d8	100.7	78-115	%	2.00	05/05/2005 19:23	

Gas/BTEX/MTBE by 8260B (C6-C12)

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Emeryville, CA 94608

Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/05/2005 14:02

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2005/05/05-2B.64

MB: 2005/05/05-2B.64-047

Date Extracted: 05/05/2005 17:47

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	05/05/2005 17:47	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/05/2005 17:47	
Benzene	ND	0.5	ug/L	05/05/2005 17:47	
Toluene	ND	0.5	ug/L	05/05/2005 17:47	
Ethylbenzene	ND	0.5	ug/L	05/05/2005 17:47	
Total xylenes	ND	1.0	ug/L	05/05/2005 17:47	
Surrogates(s)					
1,2-Dichloroethane-d4	111.4	73-130	%	05/05/2005 17:47	
Toluene-d8	104.4	81-114	%	05/05/2005 17:47	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
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Project: 247-0763-003
98996138

Received: 05/05/2005 14:02

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike**Water****QC Batch # 2005/05/05-2B.64**

LCS 2005/05/05-2B.64-025
LCSD

Extracted: 05/05/2005

Analyzed: 05/05/2005 17:25

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	26.2		25	104.8		65-165	20			
Benzene	25.0		25	100.0		69-129	20			
Toluene	27.2		25	108.8		70-130	20			
Surrogates(s)										
1,2-Dichloroethane-d4	548		500	109.6		73-130				
Toluene-d8	511		500	102.2		81-114				

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Phone: (510) 420-3341 Fax: (510) 420-9170

Project: 247-0763-003
98996138

Received: 05/05/2005 14:02

Site: 3785 Santa Rosa Avenue, Santa Rosa

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD)

Water

QC Batch # 2005/05/05-2B.64

MS/MSD

Lab ID: 2005-04-0782 - 001

MS: 2005/05/05-2B.64-030

Extracted: 05/05/2005

Analyzed: 05/05/2005 20:30

MSD: 2005/05/05-2B.64-053

Extracted: 05/05/2005

Analyzed: 05/05/2005 20:53

Dilution: 1.00

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample		ug/L	MS	MSD	RPD	Rec.	RPD	MS
Methyl tert-butyl ether	26.1	30.7	3.8	25	89.2	107.6	18.7	65-165	20		
Benzene	21.8	23.4	ND	25	87.2	93.6	7.1	69-129	20		
Toluene	23.3	26.0	ND	25	93.2	104.0	11.0	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	555	553		500	111.0	110.6		73-130			
Toluene-d8	488	508		500	97.7	101.6		81-114			

Gas/BTEX/MTBE by 8260B (C6-C12)

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Site: 3785 Santa Rosa Avenue, Santa Rosa

Legend and Notes

Analysis Flag

L2

Reporting limits were raised due to high level of analyte present
in the sample.

